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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/464,671	12/15/1999	HUAI-RONG SHAO	MS1-438US	7956

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LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER	
EL HADY, NABIL M	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/464,671	SHAO ET AL.	
	Examiner	Art Unit	
	Nabil M. El-Hady	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-68 and 70-72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-68 and 70-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *4/18/2005*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/10/2005 has been entered.

2. Applicant initiated interview request filed 1/25/2005 resulted in an interview on April 15, 2005 between the examiner and applicant representative. The content of the interview is explained in the accompanying Interview Summary.

3. Claims 1-68 and 70-72 are pending in this application.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-68 and 70-72 are rejected under 35 U.S.C. 102(e) and/or under 35 U.S.C. 103(a) as being anticipated by Aharoni et al. (US 6,014,694), hereinafter "Aharoni", and/or unpatentable over Aharoni in view of

6. Aharoni is cited by the examiner in a previous office action.

7. As to claim 1, Aharoni discloses the invention as claimed including a method comprising: receiving a data bitstream that includes object-based media information (col. 2, lines 31-32; and

col. 8, lines 56-63); associating portions of the object-based media information with a plurality a of different transmission priority levels (col. 2, lines 29-31; and Figs. 4-8); and selectively transmitting the portions of the object-based media information along with the associated plurality of different transmission priority levels (inherent, as the packet of Fig. 8 is selectively transmitting the portions of the object-based media information, i.e. K-, B-, P- Frames in the video stream of Fig. 4, that have priority level 2; and col. 11, lines 18-20) over a network (col. 2, lines 31-35) configured to provide differential services based at least on the plurality of different transmission priority levels (inherent in col. 7, lines 39-42).

8. As to claim 24, the claim is rejected for the same reasons as claim 1 above. In addition, Aharoni discloses an arrangement comprising: a server device (18, Figs. 1 and 2) configured to provide a data bitstream that includes object-based media information having portions of the object-based media information (col. 2, lines 31-32; col. 8, lines 56-63; and Fig. 4) associated with a plurality of different transmission priority levels (col. 2, lines 29-31) and that includes identifications of the associated plurality of different transmission priority levels (inherent as the selection process of transmitting portions of the object-based media information, i.e. K-, B-, P-Frames in the video stream of Fig. 4, that have priority level 2; and col. 11, lines 18-20; would inherently point to some identification to the associated priority levels to perform the selection process); at least one client device (22, Fig. 1); and at least one communication network operatively coupled between the server device and the client device (20, Fig. 1).

9. As to claim 47, the claim is rejected for the same reasons as claims 1 and 24 above. In addition, Aharoni discloses a method for use in a communications node within a network (SENDER 32, Fig. 9), the method comprising: receiving data at the communication node that

includes object-based media information (col. 11, lines 53-55) that is packetized according to different transmission priority levels (col. 2, lines 29-31; Fig. 8; and col. 11, lines 18-20); the data including indications of the different transmission priority level (inherent as Fig. 8 represent one of these packets that include identification of level 2 in each of the frames, the packet would be allowed to transmit or dropped later based on this priority level identification); and selectively outputting from the communication node the portions of the object-based media information based at least on the plurality of different transmission priority levels included in the received data (col. 2, lines 31-35; and col. 11, lines 18-20).

10. As to claim 65, Aharoni discloses the invention as claimed including a system comprising: at least one client device (22, Fig. 1) configured to receive prioritized video object-based data packets (col. 2, lines 29-35) and output control requests relating to a video object (col. 7, lines 62-67); at least one server device configured to output prioritized object-based data packets representing the video object (14, Fig. 1 and part of the VIDEO SERVER 18 of Fig. 2 and Fig. 9), the prioritized object-based data packets being prioritized based at least on part on the type of data as selected from a group comprising control data, shape data, motion data, and texture data (inherent in col. 9, lines 57-64 as the frames constitutes control data such as video object head, video layer head and video plane head, shape data, motion data, and texture data as features of the MPEG standard); and at least one video transmission agent coupled to receive the prioritized object-based data packets from the server device (parts of Fig. 9) and the control requests from the client device (col. 7, lines 63-66; and RECEIVER 108, Fig. 9), and to selectively output at least a portion of the received prioritized object-based data packets to the client device based in response to the control requests (col. 2, lines 31-35; col. 7, lines 63-67; and col. 8, lines 8-12).

11. As to claim 68, Aharoni discloses the invention as claimed including a computer-readable medium having a data structure, comprising: a first field containing identifying data associated with a portion of a data bitstream that represents a video object (e.g. 60, Fig. 4); at least one second field that is derived from the first field and includes data representing object-based video information for the video object that has been classified as having a specific transmission priority level based on at least one type of object-based video information selected from a group comprising control information, shape information, motion information, and texture information (e.g. LEVEL 1 of KEY FRAMR, Fig. 5; it is inherent that the frames constitutes control data such as video object head, video layer head and video plane head, shape data, motion data, and texture data as features of the MPEG standard); and a third field comprising a network packet header and containing identifying data associated with the specific transmission priority level of the data in the second field (inherent in e.g. Fig. 8 as it is a representative of a packet that has level 2 priority level and an indication of this priority would appear in a header to differentiate it from the next packet of different priority level in the video stream of Fig. 8 . Such packet header is a network packet header and is used to transmit the packet through the network as it is inherent in col. 9, line 64 to col. 10, line 11).

12. As to claim 72, the claim is rejected for the same reasons as claims 1and 68 above. In addition, it is well known in the art, e.g. MPEG-4, that a scene is viewed as a composition of video objects (VO) with intrinsic properties such as shape , motion, and texture. The shape information of a video object is primary (basic) information but the texture information of a video object is secondary (detail) information. Therefore, it would have been obvious to one skilled in the art at the time of the invention to associate shape information with a higher transmission priority level than texture information within a single frame in a system like Aharoni , which utilizes downstream adaptability for the transmission of video objects. Packet with a lower priority level is much more likely to be discarded than packet with higher priority level.

13. As to claims 2-4, 25-27, and 48-49, Aharoni discloses the data bitstream includes object-based media information for a single object, the single object is a video or audio object (inherent in col. 7, lines 7-11; and col. 8, lines 54-63).

14. As to claims 5 and 28, Aharoni discloses placing the portions of the object-based media information in a plurality of data packets, wherein each data packet is associated with a specific transmission priority (inherent in col. 3, lines 50-59).

15. As to claims 6 and 29, Aharoni discloses at least one of the plurality of data packets includes non-contiguous portions of data from within the data bitstream (inherent in Figs. 5, 6, and 7; in Fig. 8).

16. As to claims 7 and 30, Aharoni discloses causing the network to selectively halt the transmission of a first data packet carrying object-based media information that is associated

with a first priority level prior to halting the transmission of a second data packet carrying object-based media information that is associated with a second priority level prior if the second priority level is higher than the first priority level, should a need arise while transmitting the first and second data packets (inherent in col. 2, lines 6-7; col. 7, lines 35-36, col. 9, lines 13-15, 57-64).

17. As to claims 8, 31, and 50, Aharoni discloses different substantially guaranteed Quality of Service (QoS) transmission capabilities for different transmission priority levels (inherent in col. 7, lines 39-42).

18. As to claims 9, 32, and 51, Aharoni discloses the object-based media information includes a plurality of different types of video frame layers selected from a group that includes Intra (I) coded frame layers, Predicted (P) frame layers, Bi-directionally (B) predicted frame layers, Intra (I) coded frame enhancement layers, Predicted (P) frame enhancement layers, and Bi-directionally (B) predicted frame enhancement layers (inherent in col. 3, lines 1-8; col. 8, line 44 to col. 10, line 65).

19. As to claims 10, 23, and 52, Aharoni discloses setting the transmission priority levels based at least in part on the type of video frame layer (col. 9, lines 57-64).

20. As to claims 11, 34, and 53, Aharoni discloses causing Intra (I) coded frame layer data to have a higher transmission priority level than Predicted (P) frame layer data; causing Predicted (P) frame layer data to have a higher transmission priority level than Bi-directionally (B) predicted frame layer data; causing Bi-directionally (B) predicted frame layer data to have a

higher transmission priority level than Intra (I) coded frame enhancement layer data; causing Intra (I) coded frame enhancement layer data to have a higher transmission priority level than Predicted. (P) frame enhancement layer data; and causing Predicted (P) frame enhancement layer data to have a higher transmission priority level than Bi-directionally (B) predicted frame enhancement layer data (inherent in col. 7, lines 16-19; col. 9, line 57 to col. 10, line 48).

21. As to claims 12, 25, and 54, Aharoni discloses a plurality of different types of video object information selected from a group that includes control information, shape information, motion information and texture information (col. 9, lines 16-56).

22. As to claims 13, 36, and 55, Aharoni discloses setting the transmission priority levels based at least in part on the type of video object information (col. 9, line 57 to col. 10, line 20).

23. As to claims 14-17,37-40, and 56-59, Aharoni discloses causing at least a portion of the control information to have a higher transmission priority level than at least a portion of the shape information, causing at least a portion of the shape information to have a higher transmission priority level than at least a portion of the motion information, causing at least a portion of the motion information to have a higher transmission priority level than at least a portion of the texture information, and causing at least a portion of the texture information to have a higher transmission priority level than at least a portion of the shape information (inherent in col. 7, lines 16-19; col. 9, line 57 to col. 10, line 48).

24. As to claims 41 and 60, Aharoni discloses the object-based media information includes a plurality of different types of video frame layers selected from a group that includes Intra (I)

coded frame layers, Predicted (P) frame layers, Bi-directionally (B) predicted frame layers, Intra (I) coded frame enhancement layers, Predicted (P) frame enhancement layers, and Bi-directionally (B) predicted frame enhancement layers; the object-based media information further includes a plurality of different types of video object information selected from a group that includes control information, shape information, motion information and texture information; and wherein associating portions of the object-based media information with the plurality of different transmission priority levels further includes setting the transmission priority levels based at least in part on the type of video frame layer and the type of video object information (inherent in col. 7, lines 16-19; col. 9, line 57 to col. 10, line 48).

25. As to claims 19, 42, and 61, Aharoni discloses setting the transmission to priority levels based at least in part on the type of video frame layer and the type of video object information further includes: setting control information to a class 0 transmission priority level; setting shape information and texture DC information of at least one Intra (I) coded frame layer to a class 1 transmission priority level; setting texture AC information of the Intra (I) coded frame base layer to a class 2 transmission priority level; setting shape information and motion information of at least one Predicted (P) frame layer to a class 3 transmission priority level; setting texture information of the Predicted (P) frame layer to a class 4 transmission priority level; and setting shape information, motion information and texture information of at least one Bi-directionally (B) predicted -frame base layer to a class 5 transmission priority level, and wherein the class 0 transmission priority level is higher than the class I transmission priority level, the class 1 transmission priority level is higher than the class 2 transmission priority level, the class 2 transmission priority level is higher than the class 3 transmission priority level, the class 3 transmission priority level is s higher than the class 4 transmission priority level, and the class 4

transmission priority level is higher than the class 5 transmission priority level (inherent in col. 7, lines 16-19; col. 9, line 57 to col. 10, line 48; Figs. 4, 4, 6, 7, and 8).

26. As to claims 20-21, 43-44, and 62, Aharoni discloses receiving at least one down-stream preference with regard to the object-based media information; and selectively transmitting at least one of the portions of the object-based media information over the network based on the down-stream preference, and selectively halting the transmission of at least one of the portions of the object-based media information over the network based on the down-stream preference (inherent in col. 31-42,55-65; and col. 7, lines 39-42).

27. As to claims 22, 45, and 63, Aharoni discloses the data bitstream includes MPEG-4 encoded video data (col. 6, lines 56-60).

28. As to claims 23, 46, and 64, Aharoni discloses the network is an Internet Protocol (IP) based network (col. 2, lines 10-15).

29. As to claim 66, Aharoni discloses a network operatively coupled between the server device and the client device and wherein the video transmission agent (VTA) is operatively configured within the network (Figs. 1 and 2).

30. As to claim 67, Aharoni discloses providing differential services to the prioritized object-based data packets (inherent in col. 7, lines 39-42), such that prioritized object-based data packets having lower priority levels are selectively dropped should the network become congested (col. 7, lines 35-36; and col. 2, lines 6-7).

31. As to claim 70, the claim is rejected for the same reasons as claim 1 above. In addition, a computer-readable medium having computer-executable instructions for performing the steps recited in Claim 1 is inherent in Aharoni's disclosure.

32. As to claim 71, the claim is rejected for the same reasons as claim 47 above. In addition, a computer-readable medium having computer-executable instructions for performing the steps recited in claim 47 is inherent in Aharoni's disclosure.

33. Claims 1-64, 67, 68 and 70-72 are further rejected under 35 U.S.C. 103(a) as unpatentable over Aharoni in view of Lane et al. (US 5,729,649), hereinafter "Lane".

34. As to claims 1, 24, 47, 68, and 72, assuming that Aharoni does not explicitly enough disclose a data bistream that includes identification of the associated plurality of different transmission priority levels, or selectively transmitting portions of the object-based media information, such identification of the priority level in a data bistream is not novel in the art. Lane, for example, in a similar priotization and packetization scheme for object-based media information, discloses packetization with a packet header that includes transmission priority level and as a result selectively transmitting portions of the object-based media information, (Fig. 8b; col. 10, lines 34-46; and col. 24, lines 18-27,44-65). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Aharoni and Lane in order to facilitate selection of the data (see, Lane, col. 26, lines 5-11) in providing the differential services in Aharoni's system.

35. As to claims 2-4, 25-27, and 48-49, Aharoni discloses the data bitstream includes object-based media information for a single object, the single object is a video or audio object (inherent in col. 7, lines 7-11; and col. 8, lines 54-63).

36. As to claims 5 and 28, Aharoni discloses placing the portions of the object-based media information in a plurality of data packets, wherein each data packet is associated with a specific transmission priority (inherent in col. 3, lines 50-59). Lane, also, discloses placing the portions of the object-based media information in a plurality of data packets, wherein each data packet is associated with a specific transmission priority (Fig. 8b; col. 10, lines 34-46; and col. 24, lines 18-27,44-65).

37. As to claims 6 and 29, Aharoni discloses at least one of the plurality of data packets includes non-contiguous portions of data from within the data bitstream (inherent in Figs. 5, 6, and 7; in Fig. 8).

38. As to claims 7 and 30, Lane discloses causing the network to selectively halt the transmission of a first data packet carrying object-based media information that is associated with a first priority level prior to halting the transmission of a second data packet carrying object-based media information that is associated with a second priority level prior if the second priority level is higher than the first priority level, should a need arise while transmitting the first and second data packets (col. 30, lines 4-12).

39. As to claims 8, 31, and 50, Aharoni discloses different substantially guaranteed Quality of Service (QoS) transmission capabilities for different transmission priority levels (inherent in col. 7, lines 39-42).

40. As to claims 9, 32, and 51, Both Aharoni and Lane disclose the object-based media information includes a plurality of different types of video frame layers selected from a group that includes Intra (I) coded frame layers, Predicted (P) frame layers, Bi-directionally (B) predicted frame layers, Intra (I) coded frame enhancement layers, Predicted (P) frame enhancement layers, and Bi-directionally (B) predicted frame enhancement layers (Aharoni, col. 3, lines 1-8; col. 8, line 44 to col. 10, line 65,; Lane, col. 6, line 58 to col. Col. 10, line 3). It would have been obvious too to one skilled in the art at the time of the invention that enhancement I, P, or B frame layers are provided to add additional refinement/detail to the image, and are an integral feature of the MPEP standard (se. for example, specification, p 9, lines 4-6).

41. As to claims 10, 23, and 52, Aharoni and Lane disclose setting the transmission priority levels based at least in part on the type of video frame layer (Aharoni, col. 9, lines 57-64; and Lane, col. 30, lines 4-12).

42. As to claims 11, 34, and 53, Aharoni and Lane disclose causing Intra (I) coded frame layer data to have a higher transmission priority level than Predicted (P) frame layer data; causing Predicted (P) frame layer data to have a higher transmission priority level than Bi-directionally (B) predicted frame layer data; causing Bi-directionally (B) predicted frame layer data to have a higher transmission priority level than Intra (I) coded frame enhancement layer data; causing Intra (I) coded frame enhancement layer data to have a higher transmission

priority level than Predicted. (P) frame enhancement layer data; and causing Predicted (P) frame enhancement layer data to have a higher transmission priority level than Bi-directionally (B) predicted frame enhancement layer data (Aharoni, inherent in col. 7, lines 16-19; col. 9, line 57 to col. 10, line 48; Lane col. 29, line 52 to col. 30, line 60).

43. As to claims 12, 25, and 54, Aharoni and Lane disclose a plurality of different types of video object information selected from a group that includes control information, shape information, motion information and texture information (Aharoni, col. 9, lines 16-56; Lane col. 29, line 52 to col. 30, line 60). It is well known that the frames constitute control data such as video object head, video layer head and video plane head, shape data, motion data, and texture data as features of the MPEG standard.

44. As to claims 13, 36, and 55, Aharoni discloses setting the transmission priority levels based at least in part on the type of video object information (col. 9, line 57 to col. 10, line 20).

45. As to claims 14-17,37-40, and 56-59, Aharoni and Lane disclose causing at least a portion of the control information to have a higher transmission priority level than at least a portion of the shape information, causing at least a portion of the shape information to have a higher transmission priority level than at least a portion of the motion information, causing at least a portion of the motion information to have a higher transmission priority level than at least a portion of the texture information, and causing at least a portion of the texture information to have a higher transmission priority level than at least a portion of the shape information Aharoni, col. 7, lines 16-19; col. 9, line 57 to col. 10, line 48; Lane col. 30, lines 4-60).

46. As to claims 41 and 60, the claims are rejected for the same reasons as above.

47. As to claims 19, 42, and 61, the claims are rejected for the same reasons as above.

48. As to claims 20-21, 43-44, and 62, the claims are rejected for the same reasons as above.

49. As to claims 22, 45, and 63, Aharoni discloses the data bitstream includes MPEG-4 encoded video data (col. 6, lines 56-60).

50. As to claims 23, 46, and 64, Aharoni discloses the network is an Internet Protocol (IP) based network (col. 2, lines 10-15).

51. As to claim 70, the claim is rejected for the same reasons as claim 1 above. In addition, a computer-readable medium having computer-executable instructions for performing the steps recited in Claim 1 is inherent in Aharoni's disclosure.

52. As to claim 71, the claim is rejected for the same reasons as claim 47 above. In addition, a computer-readable medium having computer-executable instructions for performing the steps recited in claim 47 is inherent in Aharoni's disclosure.

53. Claims 65 and 66 are further rejected under 35 U.S.C. 103(a) as unpatentable over Aharoni in view of Wu et al. (ON End-to-End Architecture for Transporting MPEG-4 Video Over the Internet", hereinafter "Wu".

54. Wu is cited by the applicant in IDS paper filed 5/17/2001.

55. As to claim 65, assuming that Aharoni does not explicitly enough disclose video transmission agent (VTA) element to receive prioritized object-based data packets and control requests from the client side, such device functionality is not novel in the art. Wu, for example, discloses a module in Fig. 5 (RTP/UDP/IP Module) that to receive prioritized object-based data packets (from sender side) and control requests from the client side (receiver side). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Aharoni and Wu in order to facilitate an interactive content based video services in Aharoni's system.

56. As to claim 66, Wu discloses a network operatively coupled between the server device and the client device and wherein the video transmission agent (VTA) is operatively configured within the network (Figs 1 and 5).

57. Applicant's arguments filed 6/1/2004 have been fully considered but they are not persuasive. Therefore rejection of claims 1-68 and 70-71 is maintained. All applicant arguments are addressed above.

58. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as it addresses packetization, prioritization, quality of service, and interactive control of video object-based information:

Maeda (US 6,512,793); Boyce (US 5,923,814); Ise et al. (US 6,643,258); Zeineh (US 6,606,413); Boyce (US 6,490,705); Borella et al. (US 6,587,433); Lackman et al. (US

6,188,670); Chen et al. (US 6,057,884); Menand et al. (US 5,548,532); Eleftheriadis et al. (US 6,092,107); Ellesson et al. (US 6,459,682) ; and Chopra et al. (US 6,611,875).

59. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M. El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 18, 2005

Nabil El-Hady, Ph.D, M.B.A
Primary Patent Examiner
Art Unit 2154